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EXAMINER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/587,671
Filing Date: July 27, 2006
Appellant(s): MASCHKE, MICHAEL

Ye Ren
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 11/23/2011 appealing from the Office action mailed 5/24/2011.

(1) Real Party in Interest

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The following is a list of claims that are rejected and pending in the application:

Claims 11-24

(4) Status of Amendments After Final

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

(5) Summary of Claimed Subject Matter

The examiner has no comment on the summary of claimed subject matter contained in the brief.

(6) Grounds of Rejection to be Reviewed on Appeal

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the

subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

(7) Claims Appendix

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

(8) Evidence Relied Upon

6,907,104	Pronk	6-20005
6,394,952	Anderson et al	5-2002

Whipple et al; Pub. No.: US 2003/0230630; (Dec. 18, 2003)

Binkert et al; Pub. No.: US 2003/0197734; (Oct 23, 2003)

Banik et al; Pub. No.: US 2005/0197536; (Sep.8, 2005)

Malackowski; Pub. No.: US 2004/0267297; (Dec. 30, 2004)

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 11-15, 19, 21 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Banik et al (Pub. No.: US Pat: 2005/0197536) in view of Malackowski

(Pub. No.: US 2004/0267297) 0040] and further in view of Pronk (US Pat: 6,907,104) and further in view of Whipple et al (Pub. No.: 2003/0230630).

Regarding claims 11 and 20, Banik et al disclose a video endoscope system includes a control cabinet and an endoscope that is pertinent to the device and the method as claimed. Banik et al disclose a control cabinet 102 that includes an imaging subsystem 114 that controls the taking of the high energy image of an image sensor [see 0084]. Banik et al disclose gain control of the system is implemented by adjusting the intensity of the illumination (current supplied to the LEDs) and adjusting the gains applied to the signals by the CMOS imager. Banik et al disclose imaging subsystem 114 also includes circuitry for transmitting control signals to the image sensor and for receiving image signals from the image sensor [see 0084]. Banik et al disclose navigation, image, display and data entry controls are integrated into the system [see abstract]. The system could also prompt the user with default operating parameters for the instruments [see 0094]. Banik et al disclose a control cabinet that has a controller interface to receive commands from an input device and to control orientations and functions of the imaging endoscope [see 0078].

Banik et al disclose control cabinet may also contain a barcode scanner or radio frequency identification RFID scanner, which would allow the identification of tools that are inserted into the working channel of the endoscope [see 0093-0094]. Furthermore, Banik et al disclose implantation of bulking agents, implants and replacement of valves or other techniques to aid in closure of the lower esophageal sphincter (LES) [see 0227].

Banik et al disclose imaging subsystem coupled to control cabinet that adjusts parameters of imager such gain, or intensity of LED image sensors based on inserted tools [see 0073-0074, 0084]. As explained herein, the implants would have been scanned with an identification code and the imaging subsystem would adjust the intensity of the imager based on the type of implants or agents inserted.

Banik et al don't teach mention controlling an x-ray imaging unit for taking a high energy of an adjuvant inserted within an object.

Pronk discloses a computer that sets and controls an X-ray imaging device based on specific information of a patient such as body part to be examined by reading a chip card within which the information is stored [see column 1 lines 18-30].

In addition, Malackowski discloses a control console that controls an image guided surgery based on reading RFID of tools, prompt implant detection, identify and verify implant [see fig 27, 0040] and further mention implant recognition system of this invention can be used to facilitate the performance of image guided surgery [see 0040 and fig 27].

Furthermore, Whipple et al disclose a code has instructions to control image contrast [see abstract] which can be used to control contrast between the adjuvant and surrounding regions.

Therefore, one skilled in the art at the time the invention was made would have been motivated to combine Banik with Malackowski and Pronk by controlling an x-ray imaging with reading a chip card that contains information as taught by Pronk with information of an identification of agents or implants inserted as suggested by Banik et

al and Malackowski instead of patient information; in order to provide proper x-ray exposure [see 0073, Banik et al] and with Whipple et al by using the computer or controller to read the code that contains to control image contrast between the implant or adjuvant and surrounding areas; in order to increase visualization.

Regarding claim 12-15 and 21, Banik et al disclose one or more memories [see 0055, 0091,0095, 0113] that can be used to store operating parameters (emphasis added). Banik et al disclose navigation, image, display and data entry controls are integrated into the system [see abstract]. The system could also prompt the user with default operating parameters for the instruments [see 0094, 00662 and 0066]. Banik et al disclose bar code scanner as input device [see 0094 and 0078].

Regarding claims 19 and 24, Banik et al disclose the object is a patient [see 0061].

3. Claims 16-17 and 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Banik et al (Pub. No.: US Pat: 2005/0197536) in view of Malackowski (Pub. No.: US 2004/0267297) 0040] and further in view of Pronk (US Pat: 6,907,104) and further in view of Whipple et al (Pub. No.: 2003/0230630) as applied to claims 11 and 20 above and in further in view of Binkert et al (2003/0197734).

Regarding claims 16-17 and 22-23, Banik et al et al don't explicitly mention displaying x-ray image of a stent and an adjacent region within the object.

However, Banik et al disclose a display [see 0062, 0066 and 0113] that can display the implants (emphasis added).

Nonetheless, Blinkert et al teach an image of the suggested stent graft is displayed inserted in the graphic of the vessels in a graphic user interface [see 0020]. Blinkert et al teach CT or MR imaging [see 0220].

Therefore, one with ordinary skill in the art at the time the invention was made would have been motivated to combine Banik et al with Blinkert et al by displaying a stent and an adjacent region within the object as taught by Blinkert et al; in order to provide accuracy and increased visualization.

4. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Banik et al (Pub. No.: US Pat: 2005/0197536) in view of Malackowski (Pub. No.: US 2004/0267297) 0040] and further in view of Pronk (US Pat: 6,907,104) and further in view of Whipple et al (Pub. No.: 2003/0230630) as applied to claims 11 and 20 above and in further in view of Anderson et al (US Pat: 6,394,952).

Regarding claim 18, Banik et al don't explicitly mention displaying concentration of contrast agent.

However, Anderson et al teach data collected from the test strip are compared to a threshold or reference reflectance value to determine the presence or concentration of the analyte. The output can be displayed via an operator interface, or can be output to another computer or apparatus [see column 26 lines 27-40 and column 25 lines 57-60].

Therefore, one with ordinary skill in the art at the time the invention was made would have been motivated to combine Banik et al with Anderson by displaying a concentration of contrast agent or dye; in order to evaluate the image as to adjust a parameter of the imaging unit such as the intensity to enhance visualization of the diagnosed area.

(10) Response to Argument

Regarding claim 11, Applicant argues that Banik et al disclose a CMOS image sensor (not an x-ray imaging unit where gain control is implemented by adjusting current supplied to LED's and gains applied to signals.

The examiner agrees that Banik et al don't teach controlling an x-ray imaging unit; however, Banik et al disclose an imaging subsystem coupled to control cabinet that adjusts (controlling) parameters of an imager such gain, or its intensity [see 0073-0074, 0084] which could be any imager such as an x-ray imaging unit. Nonetheless, Pronk is relied on for the teaching of using a computer to control an x-ray imaging unit as explained in the ground of rejection above and also incorporated herein below:

Pronk discloses a computer that sets and controls an X-ray imaging device based on specific information of a patient such as body part to be examined by reading a chip card within which the information is stored [see column 1 lines 18-30].

Applicant also argues that the rejection appears to imply that CMOS image sensor is interchangeable with an X-ray unit and there is no basis to assume such. As explained above, Banik et al disclose controlling an imager and Pronk is relied on for

controlling an x-ray imaging unit. One skilled in the art at the time the invention was would have been motivated to use x-ray imaging of Pronk instead of the image sensor as taught by Banik et al because x-ray imaging is well known in the art to have a good signal to noise ration for imaging structural properties such as bones, tools etc..

Applicant argues that the rejection indicates that Banik et al could prompt for operating parameters for instruments and this is incorrect. Applicant's arguments are moot since "prompting" is not part of any claim and the office does not make such indication.

Applicant argues Banik et al and Pronk don't teach an identification of an adjuvant to set operating parameters to control contrast between an adjuvant and an adjacent region of an object in an x-ray image. Applicant also argues that chip 62 indicates an operating speed of a tool.

With regards to adjuvant; Applicant discloses adjuvants are stents or contrast agent [see 0011, specification]; therefore, any tool such as disclosed by Banik et al to replace valves are considered adjuvants.

As explained above the examiner agrees that Banik et al don't teach an x-ray imaging unit and the examiner strongly disagrees Banik et al don't teach an identification of an adjuvant to set operating parameters to control contrast between an adjuvant and an adjacent region of an object, because:

Banik et al disclose control cabinet may also contain a barcode scanner or radio frequency identification RFID scanner, which would allow the identification of tools that are inserted into the working channel of the endoscope [see 0093-0094]. Furthermore, Banik et al disclose implantation of bulking agents (which is relied on as an adjuvant) and implants and replacement of valves [see 0227].

Banik et al disclose imaging subsystem coupled to control cabinet that adjusts parameters of imager such gain or intensity [see 0073-0074, 0084] based on contrast that can happen due to the action of inserting the tools. As explained herein, the implants would have been scanned with an identification code and the imaging subsystem would adjust the intensity of the imager based on the type of implants or agents inserted. As disclosed above, an x-ray image is taught by Pronk because of its good signal to noise ratio for imaging structural properties such as bones, tools etc…

Furthermore, Whipple et al disclose a code has instructions to control image contrast [see abstract] which can be used to control contrast between the adjuvant and surrounding regions. Therefore, one skilled in the art at the time the invention was made would have been motivated to combine Banik with Whipple et al by using the computer or controller to read the code that contains to control image contrast between the implant (adjuvant) and surrounding areas as taught by Banik et al; in order to increase visualization and readability as taught by Whipple et al [see 0062].

Applicant argues that there is no bar code images in the abstract of Whipple relating to control image contrast. The examiner disagrees because the title of

Whipple's invention which disclose bar forming code that controls image contrast [see title, 0011, 0042]. Whipple further discloses properly adjusted contrast on said medium to produce maximum readability of the bars [see 0062] and means for controlling contrast [see claim 1]. Therefore, Applicant's arguments are moot.

Applicant argues that there is no motivation in the prior art to modify the references and provide all of the features and functions in each claim. Applicant further argues an assemblage of references taken from the prior art without any motivation and the assemblage is a hindsight.

The examiner disagrees because one skilled in the art at the time the invention was made would have been motivated to combine Banik with Whipple et al by using the computer or controller to read the code that contains to control image contrast between the implant (adjuvant) and surrounding areas as taught by Banik et al; in order to increase visualization and readability as taught by Whipple et al [see 0062].

Regarding claim 20, Applicant argues that none of the prior arts recognizes the benefits according to the invention of enabling adjuvants present in an object to be displayed with good contrast.

The examiner disagrees because as disclosed above, Whipple discloses properly adjusted contrast on said medium to produce maximum readability of the bars [see 0062] and means for controlling contrast [see claim 1].

Applicant argues the rejection doesn't teach an identification of an adjuvant to set operating parameters to control contrast between an adjuvant and an adjacent region of an object in an x-ray image.

As explained above the examiner agrees that Banik et al don't teach an x-ray imaging unit and the examiner strongly disagrees Banik et al don't teach an identification of an adjuvant to set operating parameters to control contrast between an adjuvant and an adjacent region of an object, because:

Banik et al disclose control cabinet may also contain a barcode scanner or radio frequency identification RFID scanner, which would allow the identification of tools that are inserted into the working channel of the endoscope [see 0093-0094]. Furthermore, Banik et al disclose implantation of bulking agents (which is relied on as an adjuvant) and implants and replacement of valves [see 0227].

Banik et al disclose imaging subsystem coupled to control cabinet that adjusts parameters of imager such gain or intensity [see 0073-0074, 0084] based on contrast that can happen due to the action of inserting the tools. As explained herein, the implants would have been scanned with an identification code and the imaging subsystem would adjust the intensity of the imager based on the type of implants or agents inserted. As disclosed above, an x-ray image is taught by Pronk because of its good signal to noise ratio for imaging structural properties such as bones, tools etc…

Furthermore, Whipple et al disclose a code has instructions to control image contrast [see abstract] which can be used to control contrast between the adjuvant and surrounding regions. Therefore, one skilled in the art at the time the invention was

made would have been motivated to combine Banik with Whipple et al by using the computer or controller to read the code that contains to control image contrast between the implant (adjuvant) and surrounding areas as taught by Banik et al; in order to increase visualization and readability as taught by Whipple et al [see 0062].

Applicant argues that claims 12-13, 21-23 are allowable because the prior arts don't teach the elements as argued above. Because Applicant's arguments are directed or similar to the above arguments; therefore, they are moot for the same reason as explained above.

Applicant argues that the prior arts don't teach displaying a stent and contrast agent concentration.

Blinkert et al teach an image of the suggested stent graft is displayed inserted in the graphic of the vessels in a graphic user interface [see 0020].

Therefore, one with ordinary skill in the art at the time the invention was made would have been motivated to combine Banik et al with Blinkert et al by displaying a stent and an adjacent region within the object as taught by Blinkert et al; in order to provide accuracy and increased visualization.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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Examiner, Art Unit 3777

Conferees:

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